

IN THE SPECIFICATION

Please enter the following replacement paragraphs on pages 1, 3 and 4, respectfully, which are marked to show the changes made.

Summary of the Invention

Continuous, shaped neon light spark plug connectors are provided for extending between and electrically connecting a coil connection or connections to a spark plug or plugs of an internal combustion engine such as a motorcycle engine. The connectors include a custom-shaped neon (or mercury vapor) tube (hereinafter called “neon tube” or “neon light tube”) of selected length, an electrode provided in each end of the neon tube, with electrical connectors receiving the wiring from the electrodes and protective boots provided on each end of the neon tube for connecting and protecting the electrical connection to the spark plug(s) and coil connection(s) of the motorcycle. Plastic shrink-wrapped tubing may also be fitted on the ends of the neon tubes and over the respective electrode and electrical connector areas, in order to receive and better seal the coil and spark plug connections under the boots and for purposes of esthetics. Also included is a method of providing one or more shaped, continuous neon light spark plug connectors between the spark plug or plugs and coil connection or connections of a motorcycle, which method includes the steps of providing a jig for measuring, cutting and bending a heated length of neon tubing into a selected configuration, attaching electrodes to each end of the neon tube, using a conventional blow hose for shaping the neon tube in the jig, evacuating the neon tube, attaching electrical connectors to the electrode wiring at each end of the neon tube for attachment to the spark plug and the coil and providing optional plastic sleeves, as well as protective rubber boots over the ends of the neon tube to protect the electrical connectors and

absorb vibration from the engine. The neon and mercury vapor tubes of this invention are continuous and thus extend between the coil and spark plug terminals, around intervening engine protrusions, without interruption.

Description of the Preferred Embodiments

Referring initially to FIGURES 1, 3 and 5 of the drawings, a first neon light spark plug connector is illustrated as reference numeral 1 and includes a first shaped neon light tube 2 of selected length and shape, having a coil end 3 and a spark plug end 11. The coil end 3 of the first shaped neon light tube 2 includes coil end wiring 4 (FIGURE 5) that extends from the internal coil end electrode 5, sealed in the corresponding end of the first shaped neon light tube. A coil connector or coil clip 9 is attached to the coil end wiring 4 extending from the coil electrode 5 and is designed for removable electrical attachment to a coil terminal (not illustrated) of the coil 36, mounted on the motorcycle engine 34, as further illustrated in FIGURE 1. A coil end boot 7 is fitted over a coil end sleeve 6 that tightly covers the coil clip 9 and the coil end 3 of the first shaped neon light tube 2 and in a preferred embodiment, the coil end boot 7 is characterized by multiple coil end boot corrugations 8, which are designed to help absorb the vibration of the motorcycle engine 34 when the first neon light spark plug connector 1 is installed as illustrated in FIGURE 1.

At the spark plug end 11 of the first shape neon light tube 2, the spark plug end wiring 12 (FIGURE 5) extends from a sealed sparkplug end electrode 13 and is secured to a spark plug connector or spark plug clip 16 for attachment to the spark plug terminal (not illustrated) of a spark plug 37, as illustrated in FIGURE 1. A plastic spark plug end sleeve 14 may be typically shrink-fitted over the spark plug clip 16 and the spark plug end 11 of the first shape neon light

5 and spark plug end electrode 13, coil connector or clip 9 and spark plug connector or clip 16 elements, as well as the connecting and protective coil end sleeve 6 and spark plug end sleeve 14 and the coil end boot 7 and spark plug end boot 15 elements, as the first shape neon light tube 2, illustrated in FIGURES 1, 3 and 5. Either one or both of the differently-shaped first and second neon light plug connectors 1 and 18 may be installed and used on the motorcycle engine 34, as desired, both connectors of which are illustrated in functional configuration in FIGURE 1.

A first neon light tube jig 20 is illustrated in FIGURES 6 and 7 and includes a jig base 21, which is typically constructed of wood or other rigid material, including fiberglass, plastic and the like, and includes a first shape neon light tube length outline 30, shaped to define the length and configuration of the first shape neon light tube 2, and is terminated by a cut indicator line 32. A shaping block 23 is either formed integrally with the jig base 21, as in the case of a molded plastic jig, or includes a separate element such as a wooden shaping block 23 that may be typically attached to the jig base 21 by means of block screws 25. The shaping block 23 is characterized by a curved block surface 24 that defines a primary bend configuration, typically at least two bends, and most preferably three bends, of the first shape neon light tube 2 illustrated in FIGURE 7, as further hereinafter described. A spacer block 26 is provided in the first neon light tube jig 20 in spaced-apart relationship with respect to the shaping block 23 and a first end block 27 is spaced-apart from the spacer block 26 and is also spaced from the shaping block 23, for purposes which will also be hereinafter further described.

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